

# DIVISION OF AERONAUTICS



Crash Fire Rescue Course—Story on pages 4 and 5.

Volume 23 — No. 10

OCTOBER - NOVEMBER, 1972

## 1,000 ATTEND AIRPORT DEDICATION

Over 1,000 persons attended the dedication of the Bert Mooney-Silver Bow County Airport in Butte, October 1, 1972. The dedication honored the memory of pioneer Butte pilot Bert Mooney who flew for Western Airlines in the early days of the organization.

Present at the dedication was Mooney's family, including his widow, Hanna; sons Capt. Brian Mooney, an Eastern Airlines Pilot, Capt. Bill Mooney, a North Central Airlines pilot, and Jay Money, a Federal Aviation Administration Inspector.

A fourth son, Al Mooney, was killed in a nonair related accident in Colorado several weeks before the dedication. He was represented by his son John.

A special plaque was presented the Mooney family by Bob Vernon, Western Airlines Montana sales representative from Great Falls. The plaque will be displayed in the lobby of the airport.

The Silver Bow County Airport Commission plaque did not arrive in time for the ceremony but the wording of the plaque was read.

In addition to the formal dedication ceremonies, a fly-in breakfast sponsored by the Civil Air Patrol attracted over 40 planes from across

the state. Five members of the Silver-tip Skydivers from the University of Montana executed three jumps and Al Newby of Bozeman performed two aerobatic demonstrations.

Other speakers included Shag Mil-

ler of the Butte Chamber of Commerce, Butte Mayor Mike Micone, and Tom Kiley a Butte attorney who is a member of the Montana Division of Aeronautics.



The Mooney Family



**DEPARTMENT OF  
INTERGOVERNMENTAL  
RELATIONS**

**Forrest H. Anderson, Governor  
Martin T. Mangan, Act. Director  
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City/County Airport  
of the**

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**Helena, Montana 59601**

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**TOWER**

**OPERATIONS**

**October 1972**

	Total Operations	Instrument Operations
Great Falls	7,325	1,420
Missoula	6,365	541
Billings	6,594	1,913
Helena	3,691	396

**Administrator's  
Column**



Just when it looked like we were on our way to bigger and better things in airport and airways improvement and additions, the President vetoed the Senate Bill that would have allowed us to match federal funds at a ratio of 25% state or local contribution and 75% federal. Now we are back to the 50/50 ratio and as far away from doing the much needed work that has been and is being planned. We will be fortunate to maintain what we have.

The Division of Aeronautics continues to search for fair and reasonable ways to obtain funds to loan and grant local governments for their needs.

On the positive side, we have had a successful fire school that I am sure will be the forerunner of many more to come. We wish to thank all of the participants, and all those who furnished supplies or equipment. I think Jerry Burrows has contacted them all.

We recently held a meeting of Region 1 of the National Association of State Aviation Officials. All the states in the region were represented at the meeting, including the newest member, the state of Alaska, which joined for the first time this year. Those present included Directors Marvin Stevenson, Wyoming; Darrell Manning, Idaho; Paul Burkett, Oregon; Dixie Mayes, Washington; and representing Ed Granger, formerly of the Montana Aeronautics Commission and now Director of the Alaska Aviation Division, was Jim Amos, the Alaskan Deputy Director. We were

also pleased to have Charles Murphy, Director of Aeronautics of Texas, and recently elected President of our national association, along with the Executive Vice President, John Nammack of the association's Washington, D.C. office. The attendance reflected the increasing activities and importance of the states in aviation matters throughout the country, and the concern the states are showing for aviation, including both general aviation and air carrier activities. Subjects discussed included the recent national association's resolution supporting Montana and North Dakota's efforts to reach a solution to the problems created by work stoppages of airlines on non-competitive routes.

Governor Forrest H. Anderson organized a group that included the mayors and civic officials from the cities and airports served by Northwest Orient Airlines. They adopted a resolution that, in effect, was adopted by the national association.

Other matters discussed included ways and means to improve the economy of general aviation, airports and navigational aids.

The organization is becoming much more active in the area of increasing the economic benefits to those whose business is aviation.

**FEDERAL AVIATION  
ADMINISTRATION  
ITINERARY LISTINGS**

Airport	Dec.
Bozeman	20
Butte	6
Culbertson	6
Glasgow	6
Glendive	6
Great Falls	6
Havre	6
Kalispell	6
Lewistown	20
Miles City	13
Missoula	7
Sidney	7

**NOTE:** Provisions have been made to give private, commercial and flight examinations **ON AN APPOINTMENT BASIS ONLY** at the following FAA Flight Service Stations.

Bozeman	Livingston
Butte	Lewistown
Cut Bank	Miles City
Dillon	Missoula
	Great Falls

**NOTE:** GADO #1 in Billings will no longer be open on Saturdays.

Every 100 new jobs in the aerospace industry generate another 160 or more jobs in unrelated fields.



## CONGRATULATIONS



### FAA CERTIFICATES ISSUED RECENTLY TO MONTANA PILOTS

#### STUDENT

Merrill Percy—Miles City

#### PRIVATE

Gary Stout—Ballantine  
Glenn Streets—Billings  
Marian Hanson—Ashland  
Stephen Kenney—Hardin  
Robert Cancro—Lame Deer  
Roy Sorley—Vida  
Alexander Blewett III—Great Falls  
Mable Wegner—Helena  
Harold Bouma—Choteau  
Ted McMurray—Manhattan  
Donald Buczynski—Spring Valley,  
California  
Roger Yaeger—Kalispell  
Joseph Daley—Kalispell

Mark Lavoie—Missoula  
Carl Brown—Corvallis  
Mac McMarrell—Eureka (AS&MEL)  
Paul Stebbins—Libby  
Debra Loutitt—Great Falls  
Kent Potter—Kalispell  
John Williams—Havre  
Gordon Miller—Great Falls  
James Stevenson—Missoula  
Jack Kelly—Malta  
Clifton Youmans—Houston, Texas  
Charles Johnson—Malta  
Mary Matoush—Three Forks  
Patrick Ross—Missoula  
Dale Massing—Harlowton

#### COMMERCIAL

Rodney Adams—Sheridan, Wyoming  
Raymond Jensen—Calgary, Alberta  
Rodney Bitney—Kalispell  
David McCleerey—Missoula (MEL-  
Rotorcraft-Helicopter)  
Gary Mastolier—Kalispell  
John Opalka—Missoula

Nicholas Grkovic—Salmon, Idaho  
Thomas Kiely—Butte (ASEL & IR)  
John Masquelier—Great Falls  
Dean Peterman—Missoula  
Monte McCann—Great Falls (MEL)  
Larry Mosley—Great Falls  
James Johnson—Missoula  
James Tandy—Gardiner

#### ATR

##### Sk-58

Richard Burger—Stevensville (VFR  
only)  
David McCleerey—Missoula (VFR  
only)  
Myron Nelson—Deer Lodge

#### FLIGHT INSTRUCTOR

Timothy Hood—Naperville, Illinois  
David Kalitzke—Columbia Falls  
Richard Goodall—Missoula  
Don Davis—Kalispell (Rotorcraft-  
Helicopter)

#### GROUND INSTRUCTOR

Donald Smith—Gt. Falls (Advanced)

#### INSTRUMENT RATING

James Elliot—Miles City  
John Engebretson—Kalispell

#### PARACHUTE RIGGER

Dean Peterman—Missoula (Master)  
Joe Kroeber—Jamestown, N. D.  
(Master)  
Dennis Friestad—Valley City, N. D.  
(Senior)

#### ROTORCRAFT - HELICOPTER

Michael Lesnik—Fishtail  
Don Davis—Kalispell  
Lawrence Stalnaker—Kalispell  
Robert Colby—Kalispell  
Vernon Paull—Missoula

#### MILITARY COMPETENCY

Ivan Foglesong—Hernando, Miss.  
Roger Oliver—LaCrosse, Wisconsin  
Jerry Sugarman—Oak Park, Mich.  
Geoffrey Pertzborn—Madison, Wis.  
(MEL & IR)

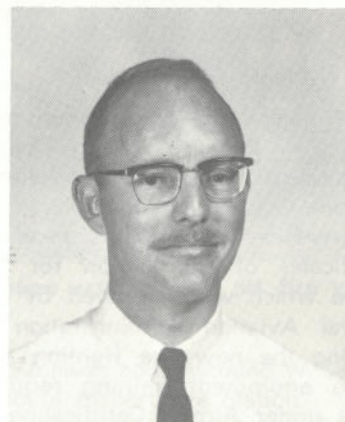
#### POWERPLANT MECHANIC

Tim Ginnis—Billings  
Robert Buckles—Poplar

#### AIRFRAME MECHANIC

Loren Downs—Molt  
Leonard Vanke—Coram

## NEW AVIATION AND SPACE EDUCATION CHIEF AT AERONAUTICS



Michael A. Schukert has been named the Aviation and Space Education Chief at the Division of Aeronautics as of September, 1972. Schukert replaces Duane Jackson who is now Foreign Language Supervisor in the office of the State Superintendent of Public Instruction. Schukert comes to the Aeronautics from Europe where he was Aerospace Education Coordinator for the U. S. Dependents Education System in Kaiserslautern, Germany.

A native of Ohio, Schukert, grew up and attended public schools in Pennsylvania and Florida. He received his BA degree in International Relations at the University of Arizona and his MEd degree in Secondary Education at the University of Florida. Schukert also did post Master's work in Curriculum and Supervision at Ohio University.

Schukert served 8 years with the United States Air Force. The first four years, Schukert served as an aircraft mechanic. After earning a commission, Schukert finished his active duty as an Air Intelligence Officer. He is presently attached to the 9001st Air Reserve Squadron as an Air Force Academy Liaison Officer.

An avid pilot, Schukert has a Commercial (SEL) License and an Advanced Ground Instructor Certificate.

Schukert is married to the former Frances Ann Sisson of Cheshire, Ohio. They have two children, Dane Erik and Karyn Jill.



## CRASH FIRE RESCUE COURSE SPONSORED BY DIVISION OF AERONAUTICS

By **JERRY BURROWS**  
Supervisor  
Plant and Equipment

The nation's first state-sponsored Crash Fire Rescue Training Course was successfully conducted in Helena, Montana October 16-18, 1972.

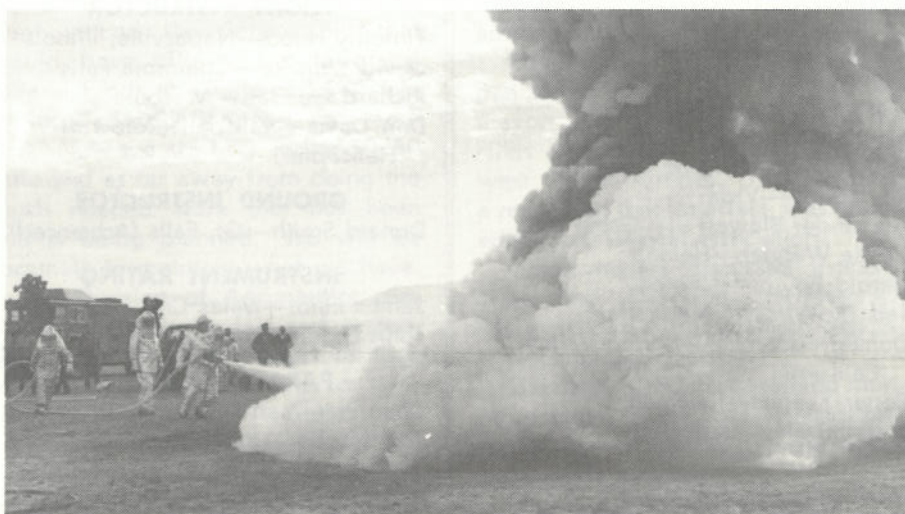
Thirty-five fire fighters received Certificates of Completion for the course which was approved by the Federal Aviation Administration in meeting the new fire fighting and rescue equipment training requirements under Airport Certification.

The course covered the basics in aircraft fire fighting which included the different types of protective clothing; explanation of the various extinguishing agents; how to establish and maintain rescue paths; aircraft types and location of emergency exits and equipment. Equally important was the training with live fires. Each man was fitted with aluminized, asbestos clothing and allowed to extinguish several of the many fires using dry chemicals, protein foam and the new aqueous film forming foam agents.

Those attending the course included: John Bongiani, Don G. Larson, Billings Fire Department; Monte A. Kempf, Edward J. Kraft and Philip L. Ryder, Billings Logan Field Fire Department; George DeHaan, Robert Lewis and Frank Wolcott, Gallatin Field; Arthur J. Korn, Frank Kinsella, James M. Lester and Tim Nadeau, Bert Mooney/Silver Bow County Airport; Milt Dove, Wesley K. King, and Norman Lyon, Glacier Park International Airport; Robert W. Lewis and Duane Maulding, Helena City/County Airport; Thomas S. Davis, Timothy A. Demers, Harry L. Dermer and Ted J. Riechert, Montana Army National Guard; R. L. Crawford, Michael R. Foster, R. D. Kileen, R. Matt Kunnary, Tom Miskovich, Robert Pare and Dennis Sorrels, Helena Fire Department; Greg Nick, Lewis and Clark Rescue Association, Helena; R. E. Betcher, Jr., Northwest Airlines, Helena; Laur-



Men approaching fire with dry chemical.



Men using dry chemicals to extinguish fire.



Darrell Thomas, Fire Chief, Montana Air National Guard, explains the function and the equipment on a Air Force Rescue truck.





Helena Firemen, Dennis Sorrels and Bob Pare, connecting an eductor system on the Helena truck.



Two teams of firefighters extinguishing pit fire using aqueous film forming foam.



Art Simms, Consultant for 3M, demonstrates proper way to approach fire.



Bill Styler (on truck) explains the principal of a Fire Boss Twinned agent.

ence J. Nush and Raymond W. Serba, Missoula Airport Fire Station.

Also receiving Certificates of Completion were: John Horn, Department of Public Instruction; Jerry Burrows, Course Manager and Frank Fleisner, Division of Aeronautics.

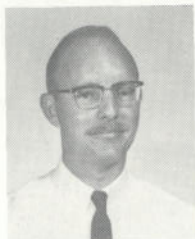
Instructors and manufacturers at the course included: Allan C. Butterworth, Federal Aviation Administration, Denver; George R. Herzog, National Foam Systems, West Chester, Pennsylvania; John T. Horn, Office of the Superintendent of Public Instruction, Helena; Jack Martinz, Superior Fire Apparatus, Helena; John M. Mobley, Federal Aviation Administration, Washington, D. C.; Terry Ness, Ness Fire Fighting Equipment, Great Falls; I. A. Simms, 3M Company, Apple Valley, California; William A. Styler, Fire Control Engineering, Anaheim, California; Darrell L. Thomas, Montana Air National Guard, Great Falls; Ted Yontz, Henry's Safety Supply Company, Billings.

Additional equipment and facilities was made available by the following organizations: Helena Airport—burning grounds; Montana Highway Department — auditorium; National Guard—fire trucks, fuel trucks and buses; Montana Air National Guard—rescue truck; City of Helena—fire trucks.

As Course Manager, I would like to thank all those who contributed so unselfishly in making this course a success and to those manufacturers throughout the nation who made available instructors, training aids and extinguishing agents.



## AVIATION EDUCATION HIGHLIGHTS



By **MICHAEL A. SCHUKERT**  
Aviation and Space Education  
Chief

Since assuming the position of Aviation and Space Education Chief from Duane Jackson, I have been devoting a lot of time to the often exasperating chore of familiarizing myself with the many projects, procedures, and materials associated with my new job. What I have inherited is at once impressive and intimidating, and it is obvious that I will have my hands full carrying on the excellent programs which my predecessor had so adeptly developed, promoted, and implemented.

One such program presently going strong in Montana's schools is the Delta Dart Project. The project is a national learning study adaptable to elementary, junior high, and high school levels and uses a model aircraft kit as the basic learning tool. Besides its co-sponsorship by the Division of Aeronautics and the Superintendent of Public Instruction, it has received the endorsement of such prominent aviation-associated organizations as the Civil Air Patrol, the Federal Aviation Administration, the Hobby Industry Association of America, the National Aerospace Education Association, the National Association of State Aviation Officials, and Aero Products Research, Inc. Recognized educationists across the country claim that the product has measurably raised achievement levels, has been an effective tool in aerospace instruction and in basic mathematics, geometry, and physics. Dr. Marian Wagstaff, Chairwoman of the Delta Dart Study Evaluation Committee, has found that the project has also motivated better reading habits, in-

creased vocabulary and generally improved communications between teachers and students. All of these gains, I feel, lend further testimony to the contention that aviation can offer a viable means of sparking the learning process of youngsters by focusing on a subject which, besides appealing to their "outside-oriented" interests, routinely brings into play facts, concepts, and processes of both the physical and the social sciences. At the present time thirteen schools in Montana have submitted applications to participate in the Delta Dart Project and include participants from grades 5 through post-secondary levels. Although selection of participating schools is on a prorata basis according to the student population of each state, schools desiring to take part in the project may still apply by writing to the Blankford Group, 8467 Beverly Boulevard, Los Angeles, California 90048.

In future columns I shall endeavor to acquaint the reader with the other Aviation and Space Education Programs currently sponsored by the Division of Aeronautics, to expose my aviation-influenced educational philosophy, and to solicit gripes, suggestions, and/or ideas relating to aerospace education in Montana. I am looking forward to a rewarding and meaningful working relationship with the Division of Aeronautics; the Department of Education, and Montana's aviation and educational community.

## FAA INSPECTOR'S CORNER



By **LAUREN D. BASHAM**  
Accident Prevention Specialist  
RM-GADO-5, Helena

### "You And The Human Factor"

Recently, we took a hard look at

the general aviation accident statistics for our district office area thus far in 1972 and came away considerably sobered when we realized that so many of these accidents were totally unnecessary.

We believe we have sufficient rules and guidelines to ensure pilot competence when adhered to. We also believe that the majority of our ground and flight instructors are capable of providing the instruction and supervision necessary for general aviation to achieve an acceptable safety level.

A high percentage of a pilot's behavior pattern is determined by the existing **rules, guidelines** and **supervision** which influence his actions from the first day he begins to learn to fly.

Why then, does the human factor in aviation accidents continue to plague us? To find an answer, we must look at the makeup of the individual and at the root cause of each accident.

As individuals we each have a different mentality. We differ from one another in the ability to apply theory to practice, to accept new ideas and to reason intelligently.

The human error in accidents is caused for the most part by two primary factors:

(1) Poor judgment.

(2) Lack of proficiency or inadequate training.

The only one of these elements which can be effected **directly** by an instructor is that of **inadequate training**.

Quite often, the investigation into the circumstances surrounding an accident reveals a lack of knowledge by the pilot or owner regarding responsibilities in maintenance and upkeep, certificates required etc. Such elements alone, however, are seldom at fault.

While poor judgment is glaringly apparent in many accidents, both fatal and non-fatal, it is exceedingly difficult to resolve or remedy. A pilot surviving an accident may be

re-examined under provisions of the Federal Aviation Act of 1958. How-



ever, unless the pilot accomplishes a training course designed to improve both his judgment and proficiency, the re-examination process is of little benefit to the pilot.

There are those who say that judgment cannot be taught—it can only be learned! Well, if it can be learned, it can also be taught—because we acquire it in varying quantities in the form of **experience** as we journey through life.

How then can good judgment be acquired by the pilot?

First we must adopt a professional attitude as pilots.

Second, we must study to keep abreast of **current** safety regulations and strive to abide by them realizing that change is both necessary and inevitable to keep pace with the needs of the industry.

Third, we must not be too proud to seek counsel and assistance from a capable, certificated flight instructor of our own choice for periodic dual instruction and recurrent training.

Fourth, we must learn to recognize our own capabilities and limitations as pilots concurrent with those of the equipment we operate.

Fifth, we must plan each flight with the full realization of those things which make that flight safe and the things which make it unsafe.

Remember, to avoid the human factor type accident, you must recognize the error before the accident occurs—accidents don't just happen, they are planned!

## AIRPORT NOTES



By **WORTHIE M. RAUSCHER**  
Deputy Administrator  
**Planning Grant Funds**

The Division of Aeronautics has

been notified by the Federal Aviation Administration of the allocation of Planning Grant Funds for two of Montana's airports: the Forsyth Airport at Forsyth, Montana has been allocated \$4,000 which represents  $\frac{1}{3}$  of the funding for a Master Plan Study to serve the Forsyth Airport for the next twenty years. Morrison-Maierle, Consulting Engineers, will conduct the study. The Helena Airport has been allocated \$13,646 in Planning Grant Funds which repre-

sents  $\frac{1}{3}$  of the cost of a study to update Helena's Master Plan. Morrison-Maierle, Consulting Engineers, will also conduct this study.

### ADAP—Matching Funds

The veto of the legislation to increase the ADAP Matching Funds to 75% federal and 25% sponsor certainly is a disappointment and a severe blow to the needed airport development within the state of Montana. It presently appears that the Senate Aviation Sub-Committee will reintroduce legislation on the same basis as the vetoed bill. The proposed bill will increase from 50 to 82% the maximum federal participation in airport security and certification projects; increase from 280 million to 350 million per year a minimum authorization for airport development grants; and additional 700 million in obligational authority for airport development grants; and an increase in federal participation from 50 to 75% in airport grants applicable to all airports except the 22 largest hubs.

The aviation trust fund revenues were up 27% in Fiscal Year 1972. The Internal Revenue Service collected 647.3 million in aviation **user** taxes during the fiscal year. This represents over 200 million dollars in surplus funds accumulating which should be made available for needed airport construction projects.

### 1973 Construction Season

The 1973 construction season is rapidly approaching. It is imperative that sponsors desiring airport construction work with federal assistance and/or state assistance commence the

planning stage of the project as soon as possible. The Division of Aeronautics will be pleased to assist any sponsor in getting planning or construction projects underway. Please let us know how we can best help you.

## ARE YOU READY FOR WINTER?

By **RICHARD F. BRODOWY**  
Acting Chief, Maintenance Unit  
RM-GADO-5, Helena

Now is the time of year to take a close look at aircraft operations and maintenance practices. We suggest that you review the following items:

1. Aircraft cold weather preparation and operation as discussed in Advisory Circular AC 91-13A.

2. The adverse effect that standing water, slush, wet or deep snow on runway have on aircraft performance, and the resulting need for weight reduction and increased runway length. Although Advisory Circular 91-6 relates to large aircraft, the contents are generally applicable to small aircraft.

3. Review of techniques for braking, steering, reversing and the determination of landing runway length required on icy or snow covered runways.

4. Aircraft de-icing/anti-icing equipment capability and limitations; system operating techniques and procedures.

5. Determination of any need to amend the Operator's Manual to include appropriate information necessary for the guidance of ground and flight crew members during cold weather operations pertinent to the geographical and weather environment likely to be encountered.

6. A review of required training programs to assure they provide adequate crew cold weather training appropriate to the assigned aircraft, type of equipment and the geographical and weather environment.



## Letters to the Editor

Mr. William E. Hunt  
State of Montana  
Division of Aeronautics  
P.O. Box 1698  
Helena, Montana 59601

Dear Mr. Hunt:

This is in regard to the crash rescue training course sponsored by your organization during the week of 15 October 1972, attended by Mr. Mobley of this Division.

To the best of our knowledge and belief, Montana was the first State

to enter into such a statewide training program connected with airport certification. We appreciate your permitting us to take part in this significant effort. Through this participation, we obtained helpful information that can be used in our development of training guidance for airport fire fighters.

In Mr. Mobley's report on your program, he singled out Mr. Gerald Burrows of your staff as having done a good job—signifying sound planning, hard work and initiative.

We wish you success in your fu-

ture courses, and we would like to offer our continued encouragement and support of the program. We feel that this can be achieved because of the close working relationship between your organization, the Helena Airports District Office, and the Airports Division in the Rocky Mountain Region.

Sincerely,

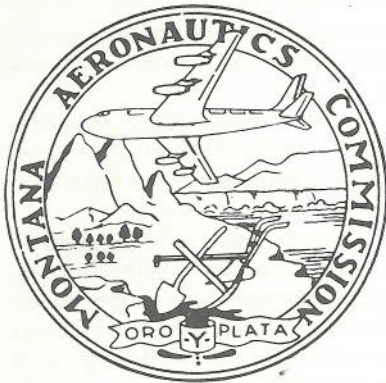
B. N. Lockett, Jr., Chief  
Operations Division  
Airports Service  
Washington, D.C. 20590

### MEMBER

#### NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation, as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

P. O. Box 1698  
Helena, Montana 59601



OCTOBER - NOVEMBER, 1972

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